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Report Highlights:
There is no commercial production of transgenic crops in Jamaica. Currently, Jamaica has no regulations governing the importation of living modified organisms for animal feed, processing, or in high-value products. However, Jamaica is currently developing legislation to ratify the Cartagena Protocol on Bio-safety and imports agricultural products will be influenced increasingly by the nature of biotechnology and bio-safety policies adopted.

Includes PSD Changes: No
Includes Trade Matrix: No
Annual Report
Santo Domingo [DR1]
[DR]

1.0 Executive Summary

Jamaica is an important market for U.S. bulk agricultural products (corn, rice and wheat), intermediate products (soybean meal and crude oil), and high value products (refined soybean oils, snack foods, etc) from the Unites States, with a total value of approximately USD 217 million in calendar 2004. In the future, imports of U.S. food and agricultural products will be influenced increasingly by the nature of Jamaica's biotechnology and bio-safety policies. As a party to the Convention on Biological Diversity and a signatory to the Cartagena Protocol on Bio-safety (CPB), Jamaica's biotechnology policies seek a balance between the economic benefits of genetic engineering and the preservation of biological diversity. Jamaica is currently developing legislation to ratify the CPB. The present regulatory framework governing the importation, development and use of the products of modern biotechnology is in the draft stage. Regulations for the importation of genetically modified organisms (GMO) for laboratory purposes are well established. Jamaica prohibits the commercial introduction of living modified organisms (LMO) into the natural environment. At present, Jamaica is monitoring the field trials of genetic engineered papaya. However, the lack of national regulatory guidelines is expected to delay the commercialization of GMOs in Jamaica.

2.0 Biotechnology Trade and Production

2.1 Production

There is no commercial production of transgenic (biotechnology) crops in Jamaica. The Biotechnology Center of the University of the West Indies is currently in the advance stage of developing a transgenic variety of papaya (*Carica Papaya L.)* that is resistant to the Papaya Ringspot Virus. Laboratory experiments are also being conducted to develop transgenic varieties of West Indian Sea Island Cotton (*Gossypium barbadense L*) that are resistant to domestic plant pests. Jamaica's National Biotechnology Strategy extensively incorporates the potential to apply the tools of modern biotechnology to specific crops that are of economic importance to Jamaica, including hot pepper (*Capsicum chinense)*, and pumpkin (*Cucubita pepo L.*).

During the early to mid-1990's Jamaica's papaya industry experienced an intense resurgence of the Papaya Ring spot Virus (PRSV), which devastated the industry and threatened the economic livelihood of farmers and others along the distribution chain. Cultivation of papaya in Jamaica is estimated to have declined under the attack of the PRSV from approximately 405 hectares in the early to mid-1990's to less than 180 hectares at present. Like other papaya producing territories, such as Hawaii, Thailand, Venezuela, and Brazil, where genetic resistance to the PRSV is not naturally available, Jamaica embarked on developing a transgenic variety resistant to the Jamaican isolate of the PRSV. The project adopted the concept of pathogen-derived resistance, using the coat protein gene of a mild mutant of the Jamaican PRSV.

The project has successfully progressed through the laboratory stage and currently transgenic lines of papaya are being field-tested that have yielded acceptable degrees of resistance to the PRSV. Commercial production of the transgenic variety is, however, being delayed by the lack of formal national policies to govern the deregulation and commercialization of products of modern biotechnology in Jamaica. The National Bio-safety Committee (NBC), the arm of the National Commission on Science and Technology that is mandated to regulate the development, import, handling, and production of Genetically Modified Organisms in Jamaica, continues to monitor the field trials.

The attempt to develop a transgenic Sea Island Cotton (Gossypium barbadense L.) variety that is resistant to domestic insect pests began in the Department of Basic Medical Science of the University of the West Indies, during 2002. The project remains in the laboratory stage and is being monitored by the NBC.

2.2 TRADE

Currently Jamaica has no regulations governing the importation of Living Modified Organisms (LMO) for animal feed or processing (such as grain corn and soybean), or high value products that are derived from GMOs (such as cooking oil). However, there are regulations governing the importation of LMOs for experimental purposes. The importation of LMOs for intentional release into the natural environment is prohibited.

Jamaica's livestock industry continues to achieve increased efficiencies, partly due to the availability of low-priced, high-quality imported grains (corn and soybeans) from the United States. Currently there is no identity preservation (IP) program, or other regulations in Jamaica that requires the segregation of shipments of grains, or other bulk agricultural commodities into GMO-free products, or that establishes minimum tolerance level for contamination. Jamaica is also a beneficiary of food aid from the United States, typically in the form of wheat flour, soybean oils, cornmeal, and whole milk powder. At the retail level, processed products are not monitored or regulated for GMO content, despite calls from consumer groups for mandatory labeling of such products.

With respect to LMOs, Jamaica prohibits the importation of LMOs for intentional commercial release into the natural environment. Under the Plants Quarantine Act, Jamaica has legislated the Plants (Importation) Control Regulations in 1997 to govern the importation of LMOs for the purpose of experimentation under controlled conditions. The regulations requires that all importers must apply to the National Bio-safety Committee for permission to import such products, and, upon approval, the application is submitted to the Plant Quarantine Division for granting of a permit by the Chief Plant Quarantine Officer. The NBC considers, chief among an array of variables, the importer's ability to enforce adequate procedures and safeguards to ensure that no contamination by or release of the plant, seed, cutting of slip, which is detrimental to the health or safety of any human, animal or other living organism will occur at the port of entry or in the country. In addition to very stringent stipulations on the physical characteristics of the packaging container, materials, and the size of the plant or plant part, the regulation requires that individual packages be labeled, indicating the content, place of origin, name and address of consignee and consignor, along with respective telephone numbers, a statement indicating that the propagative material is derived from genetic engineering procedures and possesses novel traits along with the notation " For experimentation purposes only, not for sale or reuse."

3.0 BIOTECHNOLOGY POLICIES

Jamaica is a party to the Convention on Biological Diversity (CBD), and is currently drafting comprehensive biosafety-specific legislations and policies (National Biosafety Framework) to support the ratification of the Cartagena Protocol on Bio-safety (CPB), and the full implementation of its relevant provisions. In accordance with the CPB, the National Bio-safety Framework focuses primarily on developing regulations to ensure adequate protection in the safe transfer (import, export and transit), handling, contained use, deliberate release or placing on the market of any LMOs that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health. The Framework specifically addresses LMOs for intentional introduction into the natural environment, and GMOs that are to be used directly for food, feed or processing, omitting pharmaceutical products and high-value products derived from GMOs.

Although the framework gives adequate consideration to the use of science-based risk assessment, given Jamaica's inherent lack of capacity in conducting frequent and adequate risk analysis, the implementation of the framework is expected to be heavily skewed towards adopting the precautionary principle, as is provided in Article 15 of the Rio Declaration on Environment and Development and reiterated in the CPB.

Presently, Jamaica has a fragmented institutional structure for the regulation of activities and procedures relevant to biotechnology and bio-safety. The Ministry of Agriculture administers the Plant Quarantine and Animals (Disease and Importation) Acts, which are implemented respectively through the Plant Quarantine Division and the Veterinary Services Division to regulate the importation of plants and plant parts, and live animals and animal products. The National Environment and Planning Agency administers the Natural Resources and Conservation Act, which directly relates to the conservation and sustainable use of biological diversity. The Ministry of Health administers the Food and Drug Act; the Pharmacy Act; the Pesticides Act and the Public Health Act. The Ministry of Commerce, Science, and Technology administers the Standards Act, under which the labeling policies of the county are developed. The National Bio-safety Committee, the arm of the National Commission on Science and Technology that is mandated to develop procedural guidelines for the importation, production, development and use of products of biotechnology in Jamaica, advises the Cabinet on issues pertaining to biotechnology and bio-safety. The NBC also grants approval for the importation of LMOs for experimental purposes. Under the Bio-safety Strategy, there should be significant institutional rationalization to establish a Competent Authority and National Focal Point, pursuant to the obligations of the CPB. Further, the consideration for institutional amalgamation across the Caribbean Community (CARICOM) is explored in Jamaica's draft biotechnology strategy and could be one of the most effective methods of building scientific capacity within CARICOM.

Jamaica has shown commitment to the tenets of the CPB, including the Advance Information Agreement, which provides strict guidelines for the importation of LMOs for intentional release into the environment. Given that this is the greatest area of concern for member countries, Jamaica is expected to adopt, in full, the strict language of the CPB to govern such imports. The country has established a bio-safety clearing-house (BCH) and is actively exchanging pertinent information with other contracting parties. With respect to LMOs for feed, food or processing, the national strategy is also expected to adopt the text of the CPB as sufficient.

While the CPB omits clear guidelines on the labeling of GMO, beyond the relevant categories of LMOs, labeling of products derived from genetic engineering remains one of the most contentious topics for consumers and consumer groups in Jamaica. The general consensus among consumer groups, policy makers, and scientists is to legislate mandatory labeling of all products derived from or contained products of genetic engineering, irrespective of the extent of detectable modified DNA or protein. The National Bio-safety Framework is expected to reflect the desires of the populace, as far as this subject is concerned.

The ratification of the CPB is high on Jamaica's list of priorities, especially due to the small size of the country, its rich biodiversity (ranking number five in the world among island states), the increasing emphasis on the neutraceutical industry, which depends on the country's unique biological resources and the preservation of endemic biological resources. In this context, the draft legislation and policies to support the ascension to membership of the CPB is expected to progress with urgency. It is the belief among policy makers that Jamaica should ratify the agreement during late 2006 to early 2007.

The field trials of transgenic papaya in Jamaica, the only transgenic product in the history of the country to progress to this stage, are limited to one-acre plots. At present there is only one trial plot located in central Jamaica. There are guidelines developed by the NBC to monitor the field-trial process. Jamaica does not, however, allow the field-testing of LMOs that are derived outside of the borders of the country. Further, both from a marketing and scientific standpoints, Jamaica does not allow the coexistence of transgenic and conventional products. The NBC establishes minimum distance between transgenic varieties and other conventional products of the same genus. Apart from the scientific justification of not planting adjacent trial transgenic and conventional fields, Jamaica continues to prize the European Union (EU) market for traditional and non-traditional crops and, in this respect, has to recognize the trends in the EU. In fact, the positions adopted by Jamaican regulators, with respect to mandatory labeling of GMOs, are heavily influenced by the EU.

Jamaica's National Biotechnology Strategy, which is in the draft stage, emphasizes a balance between the economic benefits of biotechnology and any associated adverse effect to the conservation and sustainable use of biological diversity, taking into account risks to human health.

4.0 MARKET ISSUES

While the domestic media has resisted sensationalizing the consumption of genetically engineered products, consumer sentiments in other parts of the world, especially Europe, have been extended to Jamaican consumer. The Consumer Affairs Commission and the National Consumer League have repeatedly asserted their position of the mandatory labeling of products derived from GMO, in support of consumers right to full information to make informed purchasing decisions. Retailers, bulk commodity importers, and livestock farmers have shown the strongest support for GMOs in Jamaica. Their views are rationalized based on the price competitiveness and nutritional enhancement of GE products. The mandatory labeling of GE products should not significantly affect the imports of bulk agricultural commodities, if it is not associated with an identity preservation program. In the latter case this would increase the price of grains and animal feeds to the livestock sector. Given the importance of the livestock industry to Jamaica's agricultural sector and the political influence of the major players in the industry, an IP program is not anticipated in the legislations. On the retail side however, mandatory labeling of such products will produce an anticipated short-lived jolt in the sale of products derived from GMO. The positive attitudes of Jamaican retailers towards products derived from GMO will help to reduce consumers' fears and anxieties. Retailers are generally more concerned with providing variety of products to suit consumers taste / preference and budget. Further, the per capita income, and resultant price sensitivity of Jamaican consumers will not support the types of consumption patters as observed in Europe and other developed territories.

5.0 CAPACITY BUILDING

The Office of Agricultural Affairs in Miami and Kingston collaborated on a biotechnology technical exchange seminar during 2002. The seminar, which was held in San Juan, Puerto Rico, specifically facilitated information exchange on technical areas of concerns in implementing national biotechnology policies within in the English-speaking Caribbean. However, in developing and implementing the National Biotechnology Policies, there are opportunities for further collaboration between the Government of Jamaica and USDA, particularly in areas relating to risk analysis, traceability and toxicology.